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5230

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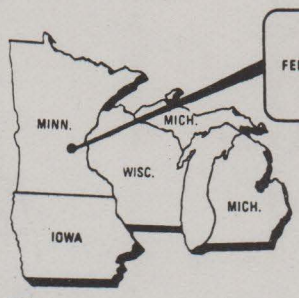

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FOREST TENT CATERPILLAR EGG-MASS SURVEY - 1969 - SUPERIOR NATIONAL FOREST

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INTRODUCTION

Severe defoliation by the Forest Tent Caterpillar, Malacosoma disstria Hbn., has occurred in northern Minnesota at about 10 year intervals since 1870's (Duncan et. al., 1956). The most severe outbreak began in 1948 and continued through 1959. The current outbreak began along the Canadian border in northeast Minnesota in 1964.

The egg-mass survey was done in cooperation with the Minnesota Department of Agriculture. The State will report on areas outside the Forest.

SURVEY METHODS

The sampling method was developed by the Minnesota Department of Agriculture. A sample plot consists of 3 dominant or co-dominant aspen trees located in a pole size stand of at least 40 acres. Each tree is felled and examined for egg-masses. If no egg-masses were found on the first 2 trees, the third tree was not cut and 0 egg-masses were reported for the plot.

SURVEY RESULTS

Very low egg-mass populations (.3 to 1.0 egg-masses per tree) indicate that defoliation will be very light to none in 1970. Research has shown that it takes 19 egg-masses on a 6" diameter tree to have a complete defoliation. Only 7 of 31 plots had any egg-masses (Fig. I).

REFERENCE

Duncan, D. P., A. C. Hodson, A. E. Schneider, H. Batzer, R. Froelich, D. Meyer, C. Shive. 1956. Influence of the forest tent caterpillar upon the aspen forests of Minnesota. Office of Iron Range Resources and Rehabilitation. Page 6.

1/ Forestry Technician, USFS, and Entomologist, Minnesota Department of Agriculture, respectively.

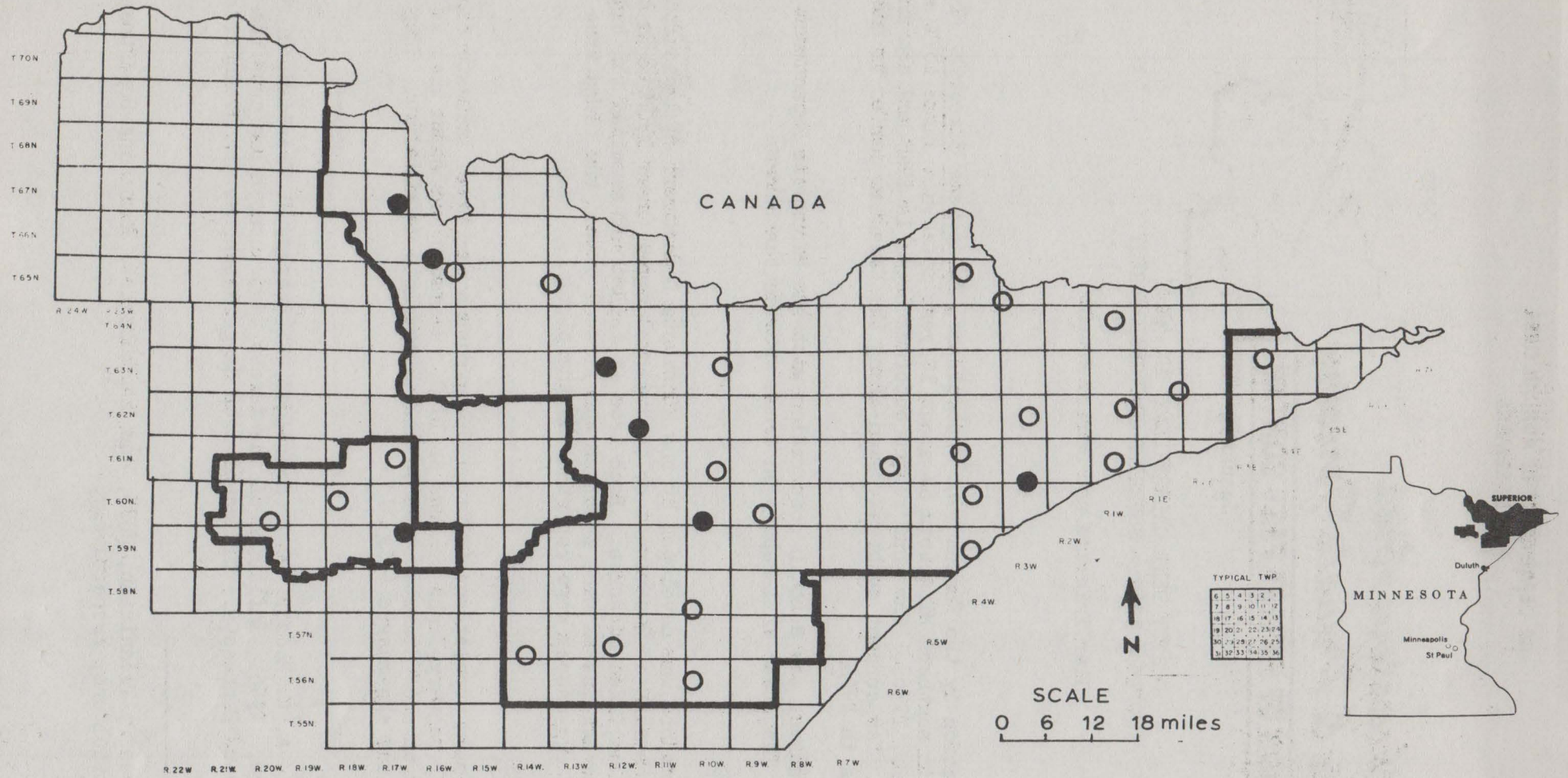

Figure I. Forest Tent Caterpillar Egg-Mass Survey on the Superior National Forest - 1969

● egg-masses present ○ egg-masses absent